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ABSTRACT

Research was conducted to determine the relative effects of an internship program on the psychosocial development of high school students. Volunteers for an internship program were recruited from a group of high school juniors and seniors. The selected students were matched with mentors who were perceived as supportive of the internship program; open and free in communication; willing to provide time and personal attention to train and direct interns; and willing to allow interns to make decisions and assist in a professional manner. The psychosocial development of participating students was assessed using two methods. These included pre and post data on personality traits obtained through completion of the Gordon Personal Profile; and review of written logs and interview data obtained from the treatment group. The primary data was analyzed using several statistical procedures. The study also identified: (1) which on-the-job factors were effective contributors to facilitating development in students; and (2) the relationship between factors. The intern/mentor relationship was an important factor in psychosocial behavior development. The results of this study present useful information for educators who are interested in implementing an effective experiential education program for high school students. Intern comments taken from logs and interviews are appended. (DWH)

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THE EFFECTS OF AN INTERNSHIP PROGRAM ON THE PSYCHOSOCIAL DEVELOPMENT OF HIGH SCHOOL STUDENTS

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Adolescence is a time when maturing individuals need to test their competencies, discover alternative modes of action and establish a firm sense of identity (Erikson, 1968; Greenberger & Sorenson, 1974). For the first time, individuals begin to make a conscious effort to change themselves and experiment with presenting various images before others (Turner, 1978). The potential of adolescence lies in giving youth experiences that substantially broaden their social contacts to include non-familial adults and by providing new roles in which adolescents may try out new behaviors (Bronfenbrenner, 1979; Campbell, 1969). In doing so, adolescents will become less dependent on parents, more oriented to the adult world and acquire more social skills and attitudes necessary to make the important transition to adulthood.

Proponents of adolescent socialization have expressed concern that the school environment does not provide the range of experience sufficient for developing these capacities. Rather, schools have prolonged dependence and contributed to the development of a youth culture where consumption instead of contribution is the dominant activity.

As a result, major educational reform studies of the 1970's published reports that strongly advocated the use of the workplace and other non-school settings as necessary learning environments for the education and socialization of youth. This, it was felt, would assist adolescents to become responsible, adult decision-makers in the community and help them make effective transitions to work and self-fulfilling productivity (Brown, 1973; Coleman, 1974; Martin, 1976). In response to these reports emerged the experiential education movement, that is, the education sector and society at large working together to expand the educational environment beyond the classroom to include the workplace, as an intentional means to satisfy the problems addressed.

Over the past decade a wide range of experiential programs have surfaced. By 1977, at least forty types of education and work programs were established in secondary school settings involving 595,770 American students primarily in their junior and senior years in high school from all socioeconomic groups and geographic areas of the country (Wasson, 1978). These programs have been classified in many ways. Generally, however, experiential education programs fall into two broad categories: (a) those that promote job-skill development and enable youth to obtain employment, or (b) those that foster personal and social development.

The first category would include vocational cooperative education and work-study programs. These programs are specific efforts directed at youth unemployment, initiated by the U.S. Department of Labor through the Youth Employment and Demonstrations Project Act (YEDPA) of 1977, and amended by the Comprehensive Employment and Training Act (CETA) of 1978 (Jipp, 1979).

The second category includes programs with such labels as "community-based learning," "action learning," "service learnings," and "youth participation" (Hamilton, 1980). All are designed for the purpose of adolescent psychosocial development, including the "capacity to be responsible adults among adults" (Jipp, 1979).

Miguel (1979) has developed a typology for studying these two general categories of experiential education programs based on Jacob Getzels' (1968) conception of behavior in a social system. This typology includes three types of programs: (a) normative, (b) perosnalistic, and (c) transactional.

The normative category refers to work organizations' roles and expectations. Programs in this category focus primarily on occupational preparation, and emphasize acquisition of knowledge and skills necessary for success in a particular job. Students placed in such a program, usually spend extensive

time (twenty hours a week or more) in one setting, are usually paid and customarily meet the institutional role expectations of the workplace. In addition, the nature of the student's work is generally routine and repetitive, seldom related to those tasks of the supervisor.

The personalistic or idiographic category focuses on "experiential learners, their personalities, needs and dispositions" (Miguel, 1979, p.7). Personalistic programs use work settings as a medium to aid adolescents in identity formation and self-concept development. Success in the program is met if self-knowledge is acquired through exploration and discussion of positive and negative reactions to experiences in the workplace. Students placed in such programs generally spend short periods of time in the workplace (fewer than ten hours a week) and are usually not paid. The work done by students in such environments often closely approximates the work done by the supervisor, who frequently encourages initiation of creative projects and ideas.

> Nonpaid learners with their own developmental goals in mind can design meaningful activities which capitalize on worksite resources, but do not intrude on staffing and production policies. (Wasson, 1979, p.64)

A transactional program has a combination of normative and personalistic characteristics "with varying degrees of attention to workplace norms and learner needs" (Miguel, 1979, p. 47). The more characteristic of students' needs and dispositions the more personalistic in type. In contrast, the greater the emphasis on workplace roles and expectations the more normative the program is.

Normative programs like Cooperative Vocational Education (1975) and federally subsidized employment and training programs have received considerable priority and support from the public coffers. Their evaluations

have been on outcomes that are job specific, that is, in terms of vocational skill or increased employment for youth which are easily measurable, and have proved to be highly developed and validated (Jipp, 1979).

However, for personalistic programs which attempt to measure more difficult variables, such as personal attitudes and self-esteem, evaluations have often been mixed or inconclusive (Miguel, 1979). Particularly in the area of psychosocial development, programs with these goals in mind have gone "relatively unremarked and unstudied," or generated data that was ungeneralizable (Greenberger, Steinberg, Vaux & McAuliffe, 1980, p. 190).

In addition, the literature suggests several other problems with past research on experiential education. First of all, many studies that have been done on experiential education programs have been directed toward a selected population (i.e., dropouts, academically talented, disadvantaged, unemployed) rather than on programs that draw their participants from the general student population. If experiential education has an impact on adolescent development as claimed by its supporters, then research needs to be done on a sampling of the entire student population to validate future programming to include all students who wish to benefit. Another concern is that when personalistic outcomes have been the goals of evaluation, they have been primarily studied in "naturally occurring part-time employment and not experiential education programs at all (Steinberg, Greenberger, Jacobi & Garduque, 1981). In addition, where research designs have used only one means of collecting data, (paper and pencil tests, for example) the effects of experiential education, so subtle and diverse, may often have gone undetected. Finally, many of the studies were not able or simply did not include, randomly selected control groups.

Although the work done by such researchers as Hamilton, Hedin & Conrad, Crowe, Walker and many others have broken much ground in investigating and substantiating current practices and outcomes in experiential education, their efforts represent only a beginning "in contrast to the billions of dollars spent to put youth in work settings" (Coleman, et. al., 1979, p. 7). Hamilton (1981) has called for research that relates experiential education programs to developmental changes to youth, where the most likely effects are to be in the domain of attitudes, self-perceptions, and broad understandings. He concludes with the belief that the research of the 70's is in its infancy. One of the greatest needs to be addresses in the 80's is to examine how experiential work programs lead to growth and learning in personal and social development.

Therefore, this study addresses the problem by attempting to answer the following questions:

1. Does participation in an Internship program significantly enhance the psychosocial development of high school students?

2. Does an Internship program make a significant difference on parents' perception of high school students' psychosocial development?

3. Does an Internship program make a significant difference on teachers' perception of high school students' psychosocial development?

METHOD

Much of the definitive literature relevant to experiential education has made strong recommendations that researchers utilize various methods for evaluating experiential education programs (Crowe & Beckman, 1979). One approach suggested is to combine several methods of data collection to test

the same hypotheses. This approach, called triangulation, could include evidence "from parents, teachers and work supervisors indicating changes in a student's orientation," student written reports and "unstructured interviews," in conjunction with paper and pencil measures (Weed & Ramsey, 1979, pp. 69-71). The present research used this approach to determine the relative effects of an Internship program on the psychosocial development of high school students.

Sample

Through general school announcements all junior and senior high school students in a large suburban community were invited to apply for the Internship program. All interested students (N-95) filled out applications and completed pretests. In addition, parents and English teachers of all the applicants completed pretests, rating the subjects on the same scales as the subjects rated themselves.

After the pretests were returned, a typological analysis procedure was used to match students on five background variables. Twenty-one matched pairs were obtained. Each pair was then split, one student being randomly assigned to the experimental group and one to the control group. In addition, 21 students who matched the experimental and control groups, but who did not apply for the program, were selected as a contrast group. Variables included sex, age, grade point average and work experience. In addition, background information was collected on variables which might be expected to influence the outcome of the study but was not controlled in establishing the three groups. For these variables, analysis of variance was used to determine if the groups were comparable. The results showed no significant difference on the California Achievement Test, math, $F\ (2,60)=.15$, English, $F\ (2,60)=.89$, relationship of siblings (younger, older or mixed), $F\ (2,60)=.75$, and socioeconomic status, as determined by parental occupation (professional and nonprofessional) $F\ (2,60)=.44$.

Procedure

Students selected for the Internship program completed proposals indicating the type of workplace and mentor (supervisor) they wished to be placed with. These proposals were given to a committee of 12 school and community members who searched databanks of professional business service organizations, and selected prospective mentors who appeared to meet the needs and interests of the students. Next, committee members interviewed mentor candidates, and selected those who were perceived as (a) supportive of the idea of an Internship program; (b) open and free in communication; (c) willing to provide time and personal attention to train and direct interns; (d) willing to allow interns to make decisions and assist in a professional way.

Once matched, interns and mentors arranged their first meeting to discuss organizational behavior and to establish a scedule of working hours that could range from four to eight hours a week for a period of six months. In addition, they discussed the goals of the program which emphasized the need to foster psychosocial development in the experiential learner. One way to best achieve this purpose was for mentors to design activities for interns that were relevant and significant to the workplace and that were markedly different from experiences interns had previously known in routine jobs and tasks.

In addition to the responsibilities interns had in the workplace, they were also required to submit weekly written logs describing their reactions about their internship experiences and to attend monthly seminar meetings where they would discuss their feelings. If interns found their workplaces unsatisfactory, they were allowed to request a change after they had worked for a minimum of four weeks. Internship sites were visited once during the six months by the coordinator (experimenter) unless circumstances required

more visitations.

Measures

The psychosocial development of students participating in the study was assessed using two methods. Pre and post data on five personality traits, Ascendency, Responsibility, Emotional Stability, Sociability and Self-Esteem were obtained through the use of the Gordon Personal Profile. Ratings on this test were done by all subjects and parents and teachers of subjects before the Internship and six months later. Also, mentors rated members of the treatment group using the same instrument.

The second method of examining the treatment effect was through the use of written logs and interview data obtained from the treatment group. The purpose of these data was to provide information that could be used as a basis for discussion of statistical findings.

Gordon Personal Profile (GPP)

Correlations between the scales of the GPP and several other measures of personality have shown that, on the whole, the obtained relationships are consistent with definitions of the GPP scales based on their item content (Gordon, 1978). For example, relationships found between the Guilford-Zimmerman Temperment Survey (Guilford and Zimmerman, 1955) and the GPP, and the Work Environment Preference Schedule (Gordon, 1973) and the GPP are supportive of the respective scale definitions.

Reliability studies on the GPP have shown scores to be quite stable. Split-half reliability coefficients for the GPP based on results of 140 college students have been reported as follows: Ascendency, .88; Responsibility, .85; Emotional Stability, .88; and Sociability, .84. In addition, using samples of 235 9th-12th graders, split-half reliabilities have been computed for the four scales. The reliabilities corrected by Spearman-Brown are,

Ascendency, .75; Responsibility, .70; Emotional Stability, .70; Sociability, .77.

The GPP was used in this study in several ways to assess the perceived personality traits it measures. Table 1 summarizes the types of data received from subjects, parents, teachers and mentors on the GPP.

Subjects rated themselves using the standard forced-choice format. This format requires subjects to respond to eighteen sets of four descriptive phrases by marking two in each set, one phrase being most like them, and one being least like them. The forced-choice format "is believed to be less susceptible to distortion by individuals who want to make a good impression than questionaires employing a single item format" (Gordon, 1978, p. 1). In addition, a forced-choice response increases validity by reducing opportunities for faking of responses. Scoring for each trait was accomplished using the keys that accompany the GPP for establishing individual scores for Ascendency, Responsibility, Emotional Stability and Sociability. To obtain the Self-Esteem score, the four scale scores are added. The first four scale scores could range from 6 to 35. Self-Esteem could range from 24-140. The higher the score the greater evidence of that trait.

Gordon discusses using the GPP as a rating scale for assessing the perceived characteristics of specific and generalized others. Several studies in which self-report scores on the GPP are correlated with ratings of respondents by others have revealed "moderately high relationships between the two types of assessment" (Gordon, 1978, p. 46).

Parents, rating students on the GPP, used a Likert format, instead of the forced-choice technique, with response categories ranging from 4--almost always, to 3--frequently, 2--occasionally, and 1--seldom or never on each of the 72 items. This approach still preserved the validity of the GPP by reducing the opportunity for saying "yes" or "no" on each item. Parents

Table 1

Gordon Personal Profile Pre and Post Assessment

	Forced-Choice Format	Lickert Format	Lickert Format Shortened Form
Subjects	X		
Parents		X	
Teachers			X
Mentors			X

were continually faced with multiple items for single traits worded from both positive and negative points of view. Scoring was done by totaling the numbers for phrases relating to each scale and recording them. For example, for each scale, parents scored 18 phrases from 1-4, and those scores were added together. All four scores could range from 18-72. Self-Esteem could range from 72-218. Higher scores represented greater evidence of that trait.

Similarly, teachers rated students on the GPP using a Likert format with the same response categories. However, because of the teachers' refusal to complete such a lengthy instrument for so many students, a shortened form was designed for their use under the direction of a statistician. The choice of items was based on the highest factor loading determined by L. V. Gordon during the course of constructing the GPP. The scoring procedure used with parent ratings was also applied to teacher ratings with one exception. Many teachers did not rate some items because they felt they did not have enough information. In order to obtain a score in these cases, an average was calculated for each scale based only on the responses given. Each scale score could range from 0 to 4, with Self-Esteem ranging from 4 to 16. The first four scores could range from 0 to 16; Self-Esteem could range from 16 to 64. The higher score represented greater evidence of the trait.

Because mentors, supervisors of the subjects in the treatment group, had limited time available to them to complete instruments, they too used the shortened form for rating the students in the Internship program. Mentors rated students two weeks after the program began and at the culmination. Mentor responses were scored using the procedure developed for teacher ratings because many mentors also refused to answer some items contending that they lacked sufficient information.

Logs and Interviews

Subjects in the treatment group were asked to submit weekly reports describing personal learning, understandings and growth experienced in Internship workplaces. Most of the resulting data were aggregated into areas that complemented the GPP scales.

In addition, interviews were conducted at the culmination of the Internship period using a schedule of fifteen questions that solicited information from the interns regarding the quality of their Internship experience and changes they observed in themselves during that time. This information too, was analyzed in relation to the trait characteristics of the GPP to assist in the interpretation of the quanitative data analyses. Information that did not parallel the scales was also examined for additional evidence of adolescent growth and development and to provide for useful insights for further inquiry.

From interviews, information was also gathered on job-related variables. Using response categories that ranged from 1--very, to 2--moderately, 3--somewhat, and 4--not very, subjects rated three factors about their Internship experience: (a) how close they were to their mentors, (b) how much responsibility they were given, and (c) their overall satisfaction with the experience. The scores were totaled; lower scores represented greater evidence of each factor. In addition, subjects indicated the total amount of hours they worked at the Internship sites.

Analysis of Data

The primary data were analyzed using five statistical procedures. First, as previously noted, analysis of variance was used to determine whether there were any significant differences between the groups on background variables not controlled for in the study. Analysis of variance was also used to investigate group comparability at pretest. Where significant

differences were found, a post hoc analysis using Scheffe's Test, was done to determine where the differences occurred.

In addition, a multi-trait multi-method matrix (Campbell & Fiske, 1959) as used in two ways. First, it was used to examine the relationships among scores on various scales of the GPP. Second, the matrix was used to examine specific relationships among student, teacher and parent scores.

The differences due to intervention were tested using analyis of covariance with pretest serving as the covariate and posttest the dependent variable. Where differences occurred a post hoc analysis, Fisher's LSD, was used to determine the means between which significant differences existed at a predetermined alpha level of .05.

Two additional statistical analyses were conducted. Unlike the others which were applied to all subjects', parents' and teachers' assessments, these analyses were used for the treatment group only. One analysis was a correlated samples t test to determine whether mentors pre and post ratings of interns on the GPP were significantly different.

Another analysis was applied to job-related variables that affected treatment group subjects in their Internships. A Pearson product-moment correlation matrix was used to determine if there were strong correlations among the job-related variables.

Non-quanitative data in the form of logs and interviews were examined for response-frequency of emerging themes and ideas that related to the GPP scales as well as providing unique observations. Since the literature review has made critical comments about the lack of evidence of statements by young people indicating their personal written and oral reactions to experiential education programs (Wasson, 1979), aggregated comments that generally reflect interns' views are presented compositely (See Appendix A) in terms of their magnitude and significance. Where quotations are cited

from either logs or interview data, they represent the most thought-provoking statements.

RESULTS

The first section of the results will report analyses relating to the following areas: (a) comparison of groups on the Gordon Personal Profile (GPP) prior to treatment, (b) relationships between the scales on the GPP, (c) relationships between participants' ratings based on the GPP, (d) differences between groups after the intervention. The second section will report data relating to the treatment group to support and expand statistical findings. Those data will include analyses of mentor ratings, student writing, personal interview data and job-related variables.

Results of the analyses of pretest data for determining comparability of treatment, control and contrast groups are as follows. There were statistical differences at the .05 or .01 level: (a) on two scales, Responsibility and Emotional Stability, for student ratings (Table 2), (b) on one scale, Emotional Stability, for parent ratings (Table 3). In all cases, the contrast group was significantly different from the treatment and control groups. There was no significant differences for teacher ratings (Table 4).

The present study calculated intercorrelations of pretest scores for all trait variables Ascendency (A), Responsibility (R), Emotional Stability (E), Sociability (S), and Self-Esteem (SE) using student, parent and teacher ratings. In a study by Gordon (1951) using two different college groups, intercorrelations were calculated for four traits, A,R, E, S, (SE was not included) to determine the degree of relationship among them. Results suggested high correlations between the traits A and S, and between R and E. Because of the number of correlations computed in this study, only coefficients significant at the .01 level were interpreted.

Table 2

Mean Pretest Scores for Student Ratings on Gordon Personal Profile

Variable	Treatment	Control	Contrast	F
Ascendency	21.86	22.86	22.19	.23
Responsibility	27.38	26.57	23.24	3.89*
Emotional Stability	25.00	24.71	21.14	5.61**
Sociability	22.29	23.48	24.86	1.01
Self-Esteem	96.76	97.62	91.43	1.69

Note: df (2,60)
*p<.05
**p<.01

Table 3

Mean Pretest Scores for Parent Ratings on Gordon Personal Profile

Variable	Treatment	Control	Contrast	F
Ascendency	54.95	51.76	50.95	1.70
Responsibility	63.19	64.19	62.67	.20
Emotional Stability	61.19	59.19	53.76	4.15*
Sociability	62.95	61.38	57.29	1.95
Self-Esteem	241.81	236.57	226.10	2.53

Note: df (2,60)
*p<.05

Table 4

Mean Pretest Scores for Teacher Ratings on Gordon Personal Profile

Variable	Treatment	Control	Contrast	F
Ascendency	2.74	2.90	2.92	.40
Responsibility	3.21	3.22	3.56	1.89
Emotional Stability	3.25	3.23	3.68	3.00
Sociability	2.88	3.29	3.53	2.87
Self-Esteem	12.07	12.76	13.66	2.98

Note: df (2,60)

Students. Table 5 reveals that pairs A and S (.68) and R and E (.52) are highly correlated for student self-ratings. This supports Gordon's research. As expected, since SE is a composite of the other four variables SE correlates significantly with all four traits, A, R, E, S, (.74, .54, .43, .63).

Parents. The pair A and S (.52) are also highly correlated for parents. Also, pairs A and E (.46), and A and R (.37) are highly correlated, while R and E (.23) are not. SE correlates significantly with all four traits, A, R, E, S, (.82, .61, .67, .69).

Teachers. Again, the pair A and S show high correlations (.41), as do pairs A and R (.51), and E and S (.34), while R and E (.26) does not. SE correlates significantly with all four traits, A, R, E, S, (.72, .69, .63, .74).

In his research, Gordon (1978) points out that even though certain pairs of scales may yield high correlations the "scales within these pairs have been found to measure functionally different aspects of personality, with their unique components resulting in substantially different validities" (p. 19).

A second series of correlations were computed to determine to what extent:

(1) students see themselves as parents see them

(2) students see themselves as teachers see them

(3) teachers see students as parents see students

The results in Table 6 show that comparing student and parent ratings, significant relationships emerge for all dependent variables, A, R, E, S, and SE. Comparison of teacher and parent ratings indicates a significant relationship only on SE. Finally, examination of comparisons of student and teacher ratings reveals no significant relationship on any of the scales. In summary, it appears that students see themselves similarly to the way parents see them and/or vice versa. However, students and teachers do not rate similarly on any of the traits, and teachers and parents score students similarly only on SE.

Table 5

Intercorrelations Between Subscales of the Gordon Personal Profile for Student, Parent and Teacher Ratings

Subscale	2	3	4	5
	STUDENTS (n=63)			
1) Ascendency	.02	.03	.68*	.74*
2) Responsibility	--	.52*	.11	.54*
3) Emotional Stability		--	.28	.43*
4) Sociability			--	.63*
5) Self-Esteem				--
	PARENTS (n=63)			
1) Ascendency	.37*	.46*	.52*	.82*
2) Responsibility	--	.23	.23	.61*
3) Emotional Stability		--	.16	.67*
4) Sociability			--	.69*
5) Self-Esteem				--
	TEACHERS (n-63)			
1) Ascendency	.51*	.06	.41*	.72*
2) Responsibility	--	.26	.18	.69*
3) Emotional Stability		--	.34*	.63*
4) Sociability			--	.74*
5) Self-Esteem				--

*p<.001

Table 6

Intercorrelations of Student, Parent and Teacher Ratings on the Scales of the Gordon Personal Profile

Subscale	1	2	3	4	5	1	2	3	4	5
Group [a]	PARENT					TEACHER				
STUDENT										
1) Ascendency	.30*	--	--	--	--	.15	--	--	--	--
2) Responsibility	--	.50*	--	--	--	--	.18	--	--	--
3) Emotional Stability	--	--	.64*	--	--	--	--	.11	--	--
4) Sociability	--	--	--	.57*	--	--	--	--	.12	--
5) Self-Esteem	--	--	--	--	.50*	--	--	--	--	.22
PARENT										
1) Ascendency						.20	--	--	--	--
2) Responsibility						--	.16	--	--	--
3) Emotional Stability						--	--	.21	--	--
4) Sociability						--	--	--	.26	--
5) Self-Esteem						--	--	--	--	.28*

[a] n=63 for each group

*p<.001

General observations of group mean differences from pre to posttest due to intervention indicate consistent, but generally nonsignificant differences between groups in the predicted direction. Statistical analyses of student ratings (Table 7) revealed significant differences on the scales, Sociability and Self-Esteem, where treatment and control groups were significantly different from the contrast group, but not significantly different from each other. For parent ratings (Table 8) on the scale of Responsibility, the treatment group was significantly higher than the control group or contrast groups. For teacher ratings (Table 9) no significant differences were found on the five scales.

Since the intervention used in this study is one where subjects' experiences are markedly diverse and individualized, measured outcomes resulting from it may well reflect these differences. Therefore, the purpose of this section is to report data relating to the varied and significant qualities and influences of the treatment which may affect the impact it had on the subjects' development.

As shown in Table 10, means and standard deviations of pre and post scores of Mentor ratings were computed and analyzed. Results of the t test reveal that the treatment group gained significantly at the .05 level on the scales R, E, and S. On the scale SE, the treatment group gained significantly at the .01 level. No significant difference was evident on the Ascendency scale. Based on this analysis, the Internship program appears to have made a significant difference on the mentor's estimation of the interns' development on all scales except Ascendency.

Another focus of this study was to identify what on-the-job factors were effective contributors to facilitating development in students and how these factors relate to each other. Analysis of logs and interview data has been useful in revealing four job-related variables that appear to be the strongest predictors of student growth. These variables are as follows: (a) the amount

Table 7

Pre, Post and Adjusted Means for Student Ratings on GPP

	Pre	Post	Adjusted
Ascendency			
Treatment	21.86	22.43	22.69
Control	22.86	23.67	23.34
Contrast	22.19	21.57	21.64
Responsibility			
Treatment	27.38	28.48	27.36
Control	26.57	28.00	27.43
Contrast	23.24	24.06	25.77
Emotional Stability			
Treatment	25.00	25.71	24.82
Control	24.71	24.76	24.05
Contrast	21.14	23.00	24.61
Sociability			
Treatment	22.29	25.14	26.00*
Control	23.48	25.81	25.85
Contrast	24.86	23.76	22.86
Self-Esteem			
Treatment	96.76	101.76	100.83**
Control	97.62	102.24	100.77
Contrast	91.43	92.48	94.89

*p<.005

**p<.05

Table 8

Summary Table of Pre, Post and Adjusted Means for Parent Ratings on the Gordon Personal Profile

Parent	Ascendency			Responsibility			Emotional Stability			Sociability			Self-Esteem		
	Pre	Post	Adj	Pre	Post	Adj	Pre	Post	Adj	Pre	Post	Adj	Pre	Post	Adj
Treatment	54.95	55.10	53.48	63.19	67.10	67.20*	61.19	62.19	60.11	62.95	63.29	61.91	241.81	245.00	240.47
Control	51.76	53.24	53.77	64.19	62.81	62.25	59.19	58.67	57.91	61.38	60.33	59.86	236.57	235.05	233.91
Contrast	50.95	49.81	50.89	62.67	61.62	62.07	53.67	53.14	55.98	57.29	59.10	60.94	226.10	223.67	229.34

* $p<.05$

Table 9

Summary Table of Pre, Post and Adjusted Means for Teacher Ratings on the Gordon Personal Profile

Teacher	Ascendency			Responsibility			Emotional Stability			Sociability			Self-Esteem		
	Pre	Post	Adj	Pre	Post	Adj	Pre	Post	Adj	Pre	Post	Adj	Pre	Post	Adj
Treatment	2.74	2.87	2.93	3.21	3.37	3.43	3.25	3.23	3.44	2.88	3.23	3.44	12.07	12.83	13.18
Control	2.90	2.82	2.80	3.22	3.28	3.34	3.23	3.24	3.32	3.29	3.40	3.37	12.76	12.86	12.89
Contrast	2.92	2.95	2.91	3.56	3.52	3.40	3.68	3.50	3.35	3.53	3.45	3.28	13.66	13.42	13.03

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Table 10

Test for Pre and Post Ratings of Interns by Mentors

Variable	[a]n	Pre	SD	Post	SD	t
Ascendency	21	3.46	.668	3.58	.581	1.28NS
Responsibility	21	3.70	.408	3.80	.346	2.59*
Emotional Stability	21	3.61	.521	3.71	.510	2.11*
Sociability	19	3.53	.642	3.69	.555	2.33*
Self-Esteem	19	14.18	1.952	14.68	1.845	3.41**

[a]n the number may vary because of non-respondents
*$\bar{p}$<.05
**p<.01

of hours interns worked; (b) the amount of responsibility interns were given; (c) the amount of attention mentors gave interns; (d) the amount of overall satisfaction interns gained from the experience. Table 11 shows high positive correlations for all variables significant at the .01 or .05 level. Although no causal connections can be determined from this type of analysis, it might be hypothesized that interns who have the greatest amount of responsibility, are more likely to have a close relationship with their mentor, put more hours into working and therefore, obtain the greatest satisfaction. Conversely, interns who do not have much responsibility or do not have a close relationship with their mentor, probably put in fewer hours and receive minimum satisfaction.

From analysis of logs and interviews, it became apparent that 16 or 76% of the interns had satisfying and worthwhile Internship experiences. Once they became familiar with their mentor/coworkers and the workplaces themselves, they felt as if they "fit right in." Mentors were instrumental in assisting their transition into the workplace by providing worthwhile and vital tasks and activities. These mentors trusted and appreciated the interns' role in the organization, were open and communicative with them, and made them feel important. Whenever possible the satisfied interns were left on their own, "like adults," to conduct business in professional a manner as possible. These interns spent as much time as they could at their respective workplaces.

Unfortunately, five or 24% of the interns were disappointed with the Internship placements. They felt anxious and uncomfortable each time they went. They felt "in the way" and "afraid of doing the wrong thing." Mentors/coworkers did not appear to care whether they were there or not, assigned "busy work", and spent little time with them explaining the life of the organization or the roles of the employees in making the business of the organization a success. Consequently, these interns had little interaction with others, did not feel involved or significant and spent as little time as possible working at the Internship sites.

Table 11

Correlations Among Job-Related Variables

Subscale	2	3	4
Hours	.47*	.71**	.48*
Mentor Closeness	--	.71**	.71**
Job Responsiblity		--	.64**
Intern Satisfaction			--

* p<.05
**p<.01

Mentors/coworkers' attitudes and relationships with interns and amount of responsibility seemed to be two critical factors in the success of the Internship experience. Generally, however, 90% of the interns did feel more mature and confident at the workplace than at school and home and were more aware of their capabilities than before the Internship experience.

DISCUSSION AND CONCLUSIONS

Overall, analysis of test data from the Gordon Personal Profile revealed few statistically significant differences among the Internship, control and contrast groups. However, the qualitative data clearly suggested that growth and development were taking place in interns. The following discussion will attempt to explain this.

Like most classical research, this study operated under certain assumptions. The first assumption was that the Internship program represented a relatively standard treatment that would generally affect subjects in the same way, such that the impact of the program could provide evidence of program effectiveness. In fact, this assumption did not reflect the reality of the program or participants' behavior.

First, the Internship program was not a single program, but rather 21 individual experiences shaped by the goals and attitudes of the mentor and the intern. Since each intern and mentor had the opportunity to negotiate the types of activities and establish relationships which would shape the Internship experience, the program became more of an evolving learning process with consequences resulting not necessarily from predetermined goals, but rather from emerging awarenesses and understandings. That is not to say that there were not commonalities. There were basic guidelines for program direction. However, conditions did vary from workplace to workplace. Such factors as mentor closeness, perceived relevance of work and amount of time spent in the workplace were important intervening variables that could assist in explaining differences on the main outcomes.

With respect to the importance of intern/mentor relationship, social learning theory (Bandura, 1977) suggests that time spent in positive interaction with an adult may be an important factor in promoting psychosocial change. That is, identification with a mature adult may result in modeling a good deal of that adult behavior. Research in experiential education has revealed that "students attach the highest priorities to the kind of interaction they have with supervisors... and appreciate open and free communication" (Jipp, 1979, p.74). In the present study, however, the quality of mentor/intern relationship needed to promote development appeared to be lacking for five or 24% of the interns. Data from logs and interviews reflected feelings that some mentors were "too busy and other workers, too unfriendly and cold" to really give the intern the attention and feedback that was needed.

Research in experiential education has also documented, at great length, that interns be assigned activities and tasks in the workplace that are real and relevant and have genuine significance. The amount of responsibility 24% of the interns had in this study had proved to be quite disappointing for them. Also, they did not feel that they were working in an environment where mentors or other workers encouraged them to be independent, make decisions or act effectively. These factors are vital if the workplace is going to serve as a catalyst for youth's personal growth and development (Jipp, 1979).

Another factor to consider with respect to the quality of the Internship experience is the amount of time interns spent in the workplace. While some worked up to thirty hours a month, others worked only about twelve hours a month. Wasson (1979) has suggested that the "potential benefits of experiential education are often compromised when learners are involved at the worksite too infrequently or for too short a period of time." Learners involved for "less than six hours per week report disjointed, only marginally satisfying

experiences" (p. 67). "It is futile to hope that a program in which adolescents spend short periods of time with adults will somehow succeed in helping them form close relations with adults" (Hamilton, 1981, p. 35).

Finally, student participation in a program does not always imply commitment. Although all students who volunteered and were selected for the program initially seemed enthusiastic and eager to meet the social expectations and responsibilities of the workplace, several made excuses that they were "too busy" and could not make the personal investment that was needed to achieve a positive outcome. Although no one dropped out of the program, a few definitely dropped off.

The point of the discussion so far is that given the small population (N=21) of interns, five who were not placed in "good" workplaces or who were not dedicated would likely have a significant effect on the total outcome when measuring and comparing the group as a whole. In other words, there may have been a blurring effect. By combining the data from all interns, regardless of whether the workplace provided the kind of experience that research emphasizes will foster adolescent development, differentiated changes in individuals may have been cancelled out in the overall analysis.

This, therefore, led to the second assumption; that is, that statistical analysis of the data from a standardized test could be used to show how much of an impact the Internship program had on subjects' post-program behavior. Although there is a correspondence between the developmental goals and the scales of the Gordon Personal Profile, there are no specific activities at each workplace that foster development in those particular areas. Moreover, the variations in each environment may very well be emphasizing development in one area rather than another. In one workplace, interns may have significant Responsibility, while in another, Sociability or interaction with

fellow workers may be more important. Some mentors expected interns to be more independent, while others were very structured about what tasks needed to be completed. Scores that reflect a wide range of different effects, when grouped, may not yield a significant effect. In addition, the complexity of the environment may have produced outcomes not measured by the instrument at all. Finally, although the GPP has been largely validated and proven reliable for use with high school students, it is not generally used as a pre-post measure of change and may be insensitive to subtle affective differences over a relatively short intervention period.

In their National Evaluation of the Executive High School Internships Program (EHSIP) conducted the The Center for Vocational Education, Crowe & Walker (1977) found no statistical difference using the GPP while questionaire and interview data indicated that the interns demonstrated a moderately high degree of personal growth. Their explanation for no statistical difference included the possibility that since the population selected for the program was already mature and adultlike in their behavior and attitudes, there was a restricted range to show measurable growth. For the present study, the GPP was used because the participants were not selected from a gifted and mature population, but rather selected because they represented a heterogenous group of students. Therefore, the assumption was that the scores would reflect a greater range from which to measure growth. Surprisingly, however, when comparisons were made between the mean scores of this study's groups and the published scores of the EHSIP and scores of first level management (Gordon, 1978), similar ratings were revealed. In addition, Crowe & Walker (1977) suggested that although the GPP was selected because it appeared to be measuring program outcomes, it may in fact not have been the most appropriate measure of affective outcome that was needed.

With respect to teacher and parent assessment of adolescent behavior, it is important to ask whether psychosocial development that may have been fostered and evidenced in the workplace can be generalized in nonwork settings of school and home. In other words, to what extent does social learning acquired in the workplace become transferred and observable by teachers and parents? From a developmental perspective, more mature thinking that adolescents develop in one setting becomes incorporated into their total social skills and extends to other settings. On the other hand, social learning theory contends that an adolescent who demonstrates mature behavior effective in a work setting, will only do so in other settings when the demands and sanctions are present. Otherwise, he/she would probably revert to less mature behavior. Work experience introduces a new set of expectations or, at least, entertains new beliefs and behavior different from those associated with high school society or family environment. Whereas interns may have behaved in accordance with behavior observed in a work setting, in a classroom, the pattern of behavior may well follow the normative expectations of peer group.

Another factor to consider in regard to the significance of teacher ratings to the present study is that for the most part, traits measured by the GPP did not lend themselves to what teachers could view in the classroom. While some evidence of Ascendency and Responsibility might be observed by a teacher, Emotional Stability and Sociability would be very difficult to assess under classroom conditions where teachers primarily work with the class as a whole allowing for limited interaction between students and teacher and students with each other. Of course, since Self-Esteem is the sum of the scales, that would be affected too. Moreover, teachers would have more difficulty assessing such traits in light of seeing students maximumly four hours a week. In Hamilton's (1981) study on the developmental effects of an experiential program, Learning Web, teachers who were asked to rate students on the same

scales, revealed little knowledge about their students' behavior and consequently gave ratings that did not differentiate among the behaviors.

With respect to parents' perception of trait development, Greenberger, Steinberg, Vaux & McAuliffe (1980) in their research on the effect of part-time employment on family and peers have reported that "major changes in adolescent parent relations with regard to autonomy do not appear to result from working" (p. 200). However, they did feel that adolescents were learning a great deal about relationships from working and that this may contribute to long term psychosocial development.

In Hamilton's (1981) study parents' assessments were most confusing. Although they declared that they saw no changes in their children's behavior in the areas identified, they praised the program's ability to affect their children such that they had more self-confidence, a new sense of direction and more creative expression. Hamilton suggests that when parents rated their children they tended to "place their children at the upper end of the rating scale and to say that they had always been that way" (p. 28). That made it difficult to gain any measurable growth from pre to post measurement.

The results of this study present useful information for educators who may be interested in implementing an effective experiential education program for high school students. First of all, the results of the quanitative data imply that an Internship program may only have the potential to increase Responsibility in the general student population. Even if this is the only gain, it is still very important, due to the fact that

> in the last decade, there has been a great deal of public concern about the level of personal and social responsibility exhibitd by teenagers. Charges of privatism, hedonism, and aimlessness among adolescents have become commonplace. (Hedin, p. 7)

The implication is that placing students in responsible roles where their work will make a difference may help them develop more responsible attitudes

and behaviors.

Second, the results of this study imply that the effectiveness of an Internship program as a whole is dependent on the similarity of the separate workplaces, in terms of job-related variables, such as, mentor closeness, and intern responsibility. Work environments must be carefully selected keeping in mind that relevant tasks and supportive mentor/coworker relationships are essential factors in influencing psychosocial development. When placing students, educators need to consider not only the skills or tasks students will be performing, but how compatable the background of the students will be with environmental and personal influences they will encounter. Perhaps educators can serve as transition links by interviewing students and mentors before they meet, accompanying youth to the new environment, and making periodic visits to check on progress. In other words, planning work experiences based on an ecological framework requires educators to look at the background of students, the environmental influences of workplaces and the links between the settings. The resulting placements may be better predictors of how great an impact experiential education programs have on youth.

Third, the results of this study suggest that the use of a quanitative research design limited the possible outcomes of the investigation. More may have been learned from the intervention if the methods put more emphasis on evidence beyond the standardized inventories. The ability to evaluate the effectiveness of a program on psychosocial development implies that students working in unique and separate work environments under the umbrella of one Internship program need to be assessed in such a way that workplace differences are accounted for. Educators need to make use of systematic observations, and continue to use written and oral data based

on the actual experiences that participants are having.

Fourth, this study has implied that teachers may not be good assessors of affective development, since indicators may not be evident in the traditional classroom. Educators might find teacher assessment of cognitive skills relating to the workplace more accurate and beneficial.

Fifth, this study has also indicated that parents should continue to be used to assess developmental changes in experiential learners. Correlations between parent and student ratings proved to be significantly high on the GPP. In other research, where instrumentation did not yield significant results, data from parent interviews and questionnaires proved to be quite useful in determining program effectiveness.

Finally, most experiential education programs are designed for the benefit of selected populations, including high-risk, academically-talented, or vocationally-oriented students rather than investigation of how such programs relate to normal development. This study implies that such a program has potential for all types of students. The implication is that if all adolescents encounter a developmental period when maturation and identity formation become critical, then all adolescents should be given opportunities to experiment with adult roles and responsibilities to assist them in the transition from youth to adulthood.

In light of these results, this study suggests some possibilities for future research: 1) devise scales to assess variations in work environments; 2) repeat the study using a larger population and longer intervention period; 3) use several methods of data collection concurrently, including parent and mentor assessments; 4) further investigate the psychosocial benefits of an experiential education program on all types of students;

5) study how students' background variables affect developmental outcomes resulting from an experiential education program; 6) assess specific mentors' personality traits and how they affect particular types of experiential learners; and 7) repeat this study with control groups comprised only of students who volunteered for the program.

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APPENDIX A

INTERNS COMMENTS FROM LOGS AND INTERVIEWS

Interns' logs and interviews were examined for responses that related to the trait characteristics of the Gordon Personal Profile and for recurring themes that went beyond the dimensions of the instrument. The following comments, presented compositely, generally reflect interns' views and feelings.

Emotional Stability

- I followed him [mentor] to his office. When we went in I felt like he was the principal and I was going to be punished.
- I was so nervous I didn't say a lot of things I was planning on saying like, Good Afternoon.
- I was a little scared, but they put me to work right away and I got over it.
- When I first walked into the store, I felt nervous. But gradually I began to feel wanted and believed I would fit right in.
- I was afraid of being left with two girls who didn't do accounting work. I thought I might slip up and then be stuck without a way to correct it, but I understood everything.
- Sometimes I'm scared because I'm afraid they will give me something I don't understand and I don't like to ask questions.
- I had a good time and felt I fit right in.
- I have learned how to deal with feelings of frustration.
- It was hard fitting in again today. I didn't feel welcome right from the start. I was angry that I had rushed like mad, only to sit around for 15 minutes until another woman gave me busy work to do. Then I heard the boss [mentor] say, "Oh, I forgot she was coming today."

. One woman was screaming at me because I did it wrong. She made me feel terrible. Even after I had explained my situation, she was still nasty.

. The whole office makes me feel stupid. I'd ask my mentor a question and she twists it all around.

. I get the feeling I'm just in the way sometimes.

Responsibility

. I'm really glad the people I work with give me "real" work and trust me so much with their clients.

. It was really fun. The ladies taught me how to make a bed, clean toilets and other fun stuff.

. He [mentor] wanted to take a break so he left and put me in charge.

. They trust me to do a job with minimum supervision.

. I am working as diligently and persistantly as all the other employees.

. I made rulings on paper which isn't very important to them, but was important to me. It showed that they're gaining trust in me and it's a step up.

. I'm just beginning to discover how necessary an accountant is. They worry as they're teaching me that I will be discouraged, but I'm in no way discouraged.

. She constantly gives me work to do which makes me feel important.

. I feel I'm reliable because anytime they need me I'm there.

. I'm of vital importance to this establishment.

. I felt like a real pharmacist. I was on my own, doing a job. I had a sense of responsibility.

. It was pretty boring, but at least I felt like I did something when I finished.

. I did basically the same as before. I worked as his receptionist, answering phones, typing, nothing new. I'm getting used to it.

. I only worked an hour doing filing. It was crowded and boring.

. It gets boring and routine and usually I can't wait to get out of there.

. The only thing that bothers me is that there is never anything planned for me to do.

. This must have been my unlucky day because I did the same thing again for the fourth week.

. My experience has shown me that pharmaceuticals is a boring industry, at least the part I saw.

Sociability

. I am more friendly to others and more outgoing.

. He [mentor] is a super nice guy and a great help.

. I like her because she acts as if she cared. She takes plenty of time to explain each part of the work to me.

. Emery complimented me on my work. That made me feel great.

. They treat me like a fellow employee and I really like their company.

. I am better able to work alongside other people.

. I love working there because the people treat me like an adult which is terrific.

. I like being accepted by the whole teaching staff. I even eat in the teacher's room and teachers actually talk to me.

Ascendency and Self-Esteem

- I feel my talents have improved a great deal.
- I feel more secure and confident about myself since I joined this program and worked in the pharmacy.
- I realize that I am changing and by learning more I can deal with my surroundings better.
- I am getting more aggressive.
- I've learned much about myself and I know I've matured.
- I go out and ask for something instead of waiting for people to come to me.
- It's a great feeling to know that I've helped kids achieve something they would not have been able to do without me.
- I feel more confident with all the machinery. Sometimes I feel very clever.
- I feel a positive change in me in how I express myself.
- My internship is helping me speak easily with people. I feel very confident.
- Walking through the door, I felt like a totally different and grown-up person.

Additional insights and understandings

- I guess you have to have some bad days to go along with the good ones.
- I felt good because I could understand her from her point of view.
- Unfortunately, I had to deal with my first death and autopsy today. I was sad, but to my surprise I handled it very well.
- I have to get my life in order and I shouldn't put things off.

- You have to prove yourself.
- I would like to learn to organize my priorities and accomplish each one of them.
- Adults have a great deal of responsibility. They are expected to do their jobs accurately and with little supervision.
- I am more thankful for what I have.
- I wish I weren't so stubborn or thickheaded.
- I would like to be able to speak the way I feel and have people understand exactly what I mean.
- Teachers look down on you, like you don't know anything and are incapable of doing the simplest task.
- Parents put too much pressure on children and make them feel inadequate when they don't fulfill their parents' dreams.
- The workworld can be confusing. You just have to take it slow and easy.